

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO		
10/621,848		07/16/2003		Kenichiro Ueda	SIW-064	1774		
	959	9 7590 08/22/2006			EXAMINER			
	LAHIVE &		FIELD		MARTIN, ANGELA J			
	28 STATE S BOSTON,		)		ART UNIT	PAPER NUMBER		
	200000, 5.20 02000				1745			
					DATE MAILED: 08/22/2006	4		

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.		Applicant(s)						
		10/621,848		UEDA ET AL.							
	Office Action Summary		Examiner		Art Unit						
			Angela J. Martin		1745						
Period fo	The MAILING DATE of this commun r Reply	ication appe	ars on the cover s	heet with the c	orrespondence ad	ldress					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).											
Status											
1)	1) Responsive to communication(s) filed on 6/8/06.										
,	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.										
<i>,</i> —	· · · · · · · · · · · · · · · · · · ·										
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.											
Disposition of Claims											
•	·										
	<ul> <li>✓ Claim(s) <u>1-15</u> is/are pending in the application.</li> <li>4a) Of the above claim(s) <u>1-5 and 11-15</u> is/are withdrawn from consideration.</li> </ul>										
	5) Claim(s) is/are allowed.										
′=	<u></u>										
· · · · · · · · · · · · · · · · · · ·	6)⊠ Claim(s) <u>6-10</u> is/are rejected.  7.\□ Claim(s) is/are objected to										
-	7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.										
·		Silon and or v		J							
Applicati	on Papers										
9)☐ The specification is objected to by the Examiner.											
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.											
	Applicant may not request that any obje										
-	Replacement drawing sheet(s) including	-	•								
11)[	The oath or declaration is objected to	o by the Exa	miner. Note the a	ttached Office	Action or form P	ГО-152.					
Priority u	nder 35-U.S.C. § 119										
,—	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.										
	<u> </u>				on No						
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>											
* See the attached detailed Office action for a list of the certified copies not received.											
Attachment			<b>,,</b> □	taminus Ossassas	(DTO 442)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/8/06. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:											
			· _ ·								

Application/Control Number: 10/621,848

Art Unit: 1745

#### **DETAILED ACTION**

This Office Action is responsive to the Amendment filed on June 8, 2006. The Applicant has amended claims 6-10. However, a new rejection is presented for the following reasons of record.

## **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 6-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 15, 16 of U.S. Patent No. 6,916,563 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because they each teach a hydrogen purge control apparatus comprising a fuel cell stack, a purged hydrogen dilution device, a regulator, and a control unit.

Application/Control Number: 10/621,848

Art Unit: 1745

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto et al., U.S. Pat. No. 6,916,563 B2.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Rejection of claims 6-10 drawn to a hydrogen purge control apparatus.

Yamamoto et al., teach a fuel cell stack from which hydrogen is purged as necessary (col. 2, lines 3-8), a purged hydrogen dilution device disposed downstream of fuel cell stack, and which includes a chamber (Fig. 2; ref. 5), a first inlet for allowing purged hydrogen to flow into the chamber (Fig. 2, ref. 11), a second inlet for allowing air to flow into the chamber (Fig. 2, ref. 12), and an outlet for discharging diluted hydrogen from the chamber (Fig. 2, ref. 13); a regulator for regulating amount of purged hydrogen

Application/Control Number: 10/621,848

Art Unit: 1745

flowing into purged hydrogen dilution device and a control unit connected to regulator (col. 7, lines 13-24), which includes a hydrogen concentration estimating section to estimate concentration at outlet of purged hydrogen dilution device based on operating state of fuel cell stack (col. 7, lines 25-58).

Thus, the claims are anticipated.

### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hamada et al., JP 11-191422, teach a fuel cell system which purges hydrogen through a control apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/621,848 Page 5

**Art Unit: 1745** 

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

)MLA